OBJECTIVES: To investigate the relationship between gaps in oral antipsychotic therapy and risk of hospitalization in the outpatient treatment of schizophrenia within a managed-care environment. **METHODS:** A retrospective evaluation of schizophrenia patients from a mental health subset of managed care (PHARMetrics) data was conducted. Patients were required to be continuously eligible for 13 months following their index date (i.e., first claim date during the enrollment period between January 1, 2000–December 31, 2001), and were followed for 12 months post-index. Inclusion criteria included a diagnosis of schizophrenia and at least one claim of an oral antipsychotic in 1999 and two in 2000 or 2001. Exclusion criteria included bipolar disorder, claims for long-term care, and long-acting antipsychotics. Medication compliance measures included maximum gap in therapy, medication possession ratio (MPR), consistence, and persistence. Logistic regression was used to analyze the odds of being hospitalized. Independent variables included compliance, age, and sex. **RESULTS:** Of the 1499 subjects included in the study (mean [SD] age = 45.1 ± 12.4 years; 46.6% were male), 5.9% were hospitalized at least once. The odds of hospitalization in this population rose by 2.1% for every 5-day increase in therapy gap ($p = 0.0004$) based on a continuous model. Patients with >30-day maximum gap in their medication had higher odds (4.66, $p < 0.0001$) of hospitalization than the 0 to 10 day reference group. The 11 to 30 day gap group approached significance with an odds ratio of 2.10 ($p = 0.05769$). MPR and consistence models indicated that the odds of hospitalization decrease by a factor of 0.831 ($p < 0.0001$) and 0.812 ($p < 0.0001$) for a 10% increment in MPR and consistence respectively. Age was a significant predictor of hospitalization in all models. Persistence and gender were not significant predictors. **CONCLUSIONS:** Gaps in oral antipsychotic treatment are associated with an increased risk of hospitalization in schizophrenic patients.

PMH3

FATORS ASSOCIATED WITH SECOND-GENERATION ANTIPSYCHOITC USE IN THE CALIFORNIA MEDICAID (MEDI-CAL) PATIENTS WITH SCHIZOPHRENIA

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OBJECTIVE: Olanzapine and risperidone are the two most widely used second-generation antipsychotic medications by California Medicaid (Medi-Cal) patients with severe mental disorders. This analysis investigates the factors associated medication choice for Medi-Cal patients with schizophrenia who restart therapy after a break in treatment. **METHOD:** Paid claims data were analyzed to identify antipsychotic 're-starter' treatment episodes initiated between January 1999 and March 2003. An episode was defined each time a patient re-started therapy on a new medication or the same drug after a break of 15 days or more. Re-starter episodes with either olanzapine or risperidone only were selected if 6 months of pre-treatment and 12 months of post-treatment data were available. Multivariate logistic regression was used to determine the factors that affected treatment choice. **RESULTS:** A total of 186,338 re-starter treatment episodes met study selection criteria (56% olanzapine). Mean age was 44 years; mean duration of uninterrupted therapy was 135 days. Patients 35–65 years of age were between 6% to 9% more likely to receive olanzapine, as were male patients (+21%) and patients with a prior psychiatric hospitalization (+4%). The likelihood of using olanzapine increased with the prior use of non-institutional care. Risperidone patients were more likely to be urban residents (+5%), classified as disabled (+6%), supplemental security income (+17%) or AFDC (+6%) eligible, Hispanic (+12%), black (+10%), diabetic (+22%) and have a history of prior nursing home use (+14%). Risperidone patients were more likely to be age 65–75 (+7%) or 75+ (+19%), with no differences observed in the under 35 population ($p < 0.05$ for all results). **CONCLUSION:** Physicians in California used olanzapine and risperidone differentially to treat patients with schizophrenia. The observed differences in patient characteristics for olanzapine and risperidone patients may affect both treatment outcomes and post-treatment costs and must be adjusted for before comparing the outcomes achieved using these agents.

PMH4

ATYPICAL ANTIPSYCHOTIC TREATMENT ADHERENCE AND PERSISTENCE IN A STATE MEDICAID PROGRAM

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OBJECTIVES: To assess one-year medication adherence and persistence among schizophrenia clients who initiated therapy with olanzapine, quetiapine or risperidone. **METHODS:** Indiana Medicaid Program enrollees were included in this analysis if they were diagnosed with schizophrenia (ICD9-295); initiated olanzapine (n = 711), quetiapine (n = 292) or risperidone (n = 602) between January 1, 1999 and December 31, 2000; had not received the three atypicals in the year prior-initiation; and non-institutionalized and continuously enrolled 1-year prior and 1-year post the initiation. Descriptive and multiple analyses were used to compare olanzapine, quetiapine and risperidone groups on three outcome measures: adherence rates (percent days of medication possession); persistence (continuous treatment days); and the likelihood of switching/augmenting the other medications of interest, by controlling for demographics, comorbidities, and prior medication use patterns. **RESULTS:** Individuals initiated on olanzapine had a statistically significantly higher adherence rate (59.1%) than those receiving quetiapine (52.0%, $p < 0.007$) or risperidone (54.4%, $p < 0.037$), and a significantly longer persistence (153 days) than those treated with quetiapine (135 days, $p < 0.001$) or risperidone (140 days, $p < 0.001$). Olanzapine patients also were less likely to switch and/or augment (17.6%) than quetiapine patients (26.0%, $p < 0.032$). Adherence, persistence and likelihood of switch/augmentation didn't significantly differ between patients initiated on quetiapine and risperidone. **CONCLUSION:** Compared to quetiapine or risperidone, olanzapine was associated with better adherence and persistence among individuals with schizophrenia.

PMH5